



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

NOV 03 2016

Mr. Sam Denny
The Brewery Works, Inc.
1555 North Rivercenter Drive, Suite 209
Milwaukee, Wisconsin 53212

RE: Remediation Work Plan Update
Polychlorinated Biphenyls (PCBs) Stained Concrete
Schlitz Park – Powerhouse Building (Chilled Water Plant)
1542 North 2nd Street, Milwaukee, Wisconsin 53212

Dear Mr. Denny:

The U.S. Environmental Protection Agency has reviewed the August 30, 2016 Remediation Workplan Update submitted on your behalf by AECOM Technical Services, Inc.

You have been addressing the cleanup of PCB contaminated and stained concrete on a former transformer pad located near the northeast corner of the powerhouse building under previous EPA approvals dated December 20, 2011 and October 31, 2012. The Powerhouse building is currently used to house mechanical and electrical equipment used to support the Schlitz Park building complex. In email correspondence dated September 1, 2016, AECOM indicated that there is no plan to change the low occupancy use of the area or redevelop the building anytime within the next 5 years.

EPA's December 20, 2011 approval allowed for scarification of the concrete pad to meet a 1 milligram per kilogram (mg/kg) cleanup objective. On July 30, 2012, AECOM notified EPA that scarification of the concrete (removal of up to ¾ inches of concrete) was not an effective method for meeting the cleanup objective. As a result, AECOM subsequently proposed to remove for off-site disposal, the entire PCB impacted transformer concrete pad, which was thought to have been cast into an underlying metal pan, followed by cleaning and sampling of the metal pan. On October 31, 2012, EPA approved the July 30, 2012 Notice of Scope and/or Schedule Change.

In your August 30, 2016 update, you explain that prior to starting the concrete removal, a test core was drilled completely through the concrete floor and did not encounter the anticipated underlying metal pan. Your letter notes that, upon conducting a structural engineering review of the concrete transformer pad, it was discovered that the concrete pad is an integral part of the

second story structure and that there is no metal pan within the floor structure as previously believed.

Given the structural integrity concerns, you request the use of engineering and institutional controls to minimize contact with residual PCB remaining in former transformer pad concrete at up to 440 mg/kg. AECOM collected six confirmation wipe samples from the glazed ceramic tile area immediately around transformer pad area to document that the PCB impacts do not extend beyond the concrete pad area. All wipe sample results were less than the decontamination standard for non-porous surfaces of 10 microgram per 100 cm².

The Toxic Substance Control Act (TSCA) Self-implementing on-site cleanup and disposal regulations at 40 CFR §761.61(a)(4)(iii) allow for the cleanup of porous surfaces for use in accordance with §761.30(p). You propose to meet the barrier requirements of §761.30(p)(iii) through the use of a cap consisting of:

1. Self-leveling concrete placed on the previously scarified concrete to fill the 0.5 to 0.75 inch space between the previously scarified concrete pad surface and the adjacent surrounding floor (steel frame and ceramic tile).
2. A solid barrier consisting of a 3/16th inch nominal thickness steel plate covering the entire pad and steel frame. The steel plate will be fastened to the steel frame via welds or bolts and a polyurethane caulk will be applied to the perimeter of the steel plate to provide a seal.
3. Three PCB Mark (M_L) labels placed on the steel plate at visible locations approximately every 10 feet of length.

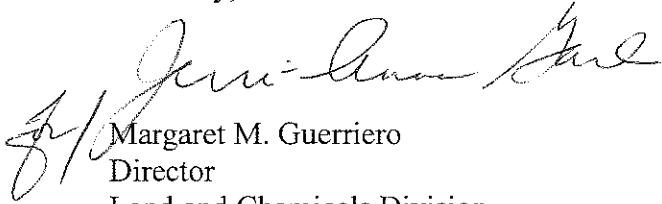
You will record a notation to the property deed in accordance with 40 CFR §761.61(a)(8) and provide confirmation to EPA of this recordation and the completion of the cap. Repairs to the cap shall begin within 72 hours of discovery for any breaches which would impair the integrity of the cap (40 CFR §761.61(a)(7)).

For the reasons set forth above, EPA is approving your request under 40 CFR §761.61(c) to allow elevated levels remaining in the concrete to exceed those permitted under the self-implementing regulations at 40 CFR §761.61(a). Please note that if the Brewery Works, Inc. decides to change the use of the capped area, or redevelops the building such that the capped area will become a high occupancy area, you must notify this office at the time of such decision and prior to any redevelopment or change in use of the capped area.

This letter does not relieve you from compliance with any other federal, state or local regulation and does not preclude EPA from initiating any enforcement action, including an action seeking civil penalties for any violation of federal regulations.

In addition, if you wish to make any additional changes to your work plan (including changes in the project schedule), then you must submit your proposal to Peter Ramanauskas, of my staff, in writing no less than 14 calendar days prior to the proposed implementation of the change. If you have any questions, please contact him at ramanauskas.peter@epa.gov or (312) 886-7890.

Sincerely,

A handwritten signature in cursive script, appearing to read "Margaret M. Guerriero".

Margaret M. Guerriero
Director
Land and Chemicals Division

cc: Richard Mazurkiewicz, AECOM



AECOM
1555 N RiverCenter Drv. Ste 214
Milwaukee, WI 53212

414.944.6080 tel
414.944.6081 fax

July 30, 2012

Peter Ramanauskas
Regional PCB Coordinator / PCB Remediation
US EPA Region 5
Ralph Metcalfe Federal Building
77 West Jackson Blvd.
Chicago, IL 60604-3590
(312) 886-7890
ramanauskas.peter@epa.gov

**Subject: Polychlorinated Biphenyls (PCBs)
Remediation Work Plan
Schlitz Park-Powerhouse (Chilled Water Plant)
1542 North 2nd Street
Milwaukee, Wisconsin 53212**

Dear Mr. Ramanauskas,

AECOM Technical Services, Inc., (AECOM) was retained by The Brewery Works, Inc. (The Brewery Works) on July 20, 2011 to provide PCB remediation, oversight and reporting at the property located at 1542 North 2nd Street in Milwaukee, Wisconsin ("Site", **Figure 1**).

Background

The Site is part of the former Schlitz Brewery complex. A Phase I Environmental Site Assessment (ESA) by Key Engineering Group, LTD, (9/15/2011) documented stained concrete on a former transformer pad within the building. The transformer pad is located on the second floor, near the northeast corner of the building. The transformer pad consists of a flush concrete pad that was poured into a 6-inch deep bare metal pan. The pad is surrounded by 6-inch square non-porous glazed ceramic floor tiles.

AECOM confirmed the presence of PCB's via wipe sampling on October 4, 2011. The three wipe sample locations were selected to be representative of the former pad area as a whole (one at each end and one in the middle). The wipe areas for each stain were located on the darkest portion of the stain. The wipe sample results ranged from 1.26 micrograms per 100 square centimeters ($\mu\text{g}/100 \text{ sq-cm}$) to 150 $\mu\text{g}/100 \text{ sq-cm}$, confirming the presence of PCBs in the concrete pad. Refer to **Figure 2** for the former transformer pad layout and sample locations.

On October 25, 2011, AECOM sent a PCB remediation work plan to the EPA describing the scarification/removal of approximately ½-inch of concrete from the transformer pad, which is a common remedial technique for removing PCB impacts from concrete surfaces. The work plan was approved by the EPA on December 20, 2011.

On January 12, 2012, AECOM provided oversight of the scarification, with the removal of ½-inch to ¾-inch of concrete from the transformer pad (an extra ¼-inch of material was removed from the east portion of the pad, the area of heaviest staining). The visible concrete stains were removed during the scarification process and the tile area surrounding the pad was cleaned with a PCB cleaning fluid (commercially known as "Less Than 10"). Two 55-gallon drums of concrete debris, personal protective equipment, vacuum filters and hoses and cleaning rags were generated and disposed as a TSCA waste by Clean Harbors, Inc (Clean Harbors). A copy of the waste disposal documentation is provided as **Attachment A**. AECOM collected six confirmation wipe samples (CW-1 through CW-6) from the ceramic tile area immediately around transformer pad area to

document that the PCB impacts do not extend beyond the concrete pad area. The confirmation wipe analytical results ranged from less than 0.77 µg/100 sq-cm to 1.1 µg/100 sq-cm, which is less than the 10 µg/100 sq-cm EPA standard. Post scarification PCB wipe sample results are illustrated on **Figure 3**. The wipe sample PCB laboratory analytical results are provided as **Attachment B**.

AECOM also collected five confirmation bulk concrete samples from the scarified concrete surface to document that the PCB impacts were removed. The confirmation bulk samples (CB-1 through CB-5) were collected by drilling ½-inch into the scarified surface and submitting the drill cuttings for analysis. The analytical results for three of confirmation bulk samples (CB-1, CB-3 and CB-4) were below the EPA standard of 1,000 micrograms per kilogram (µg/kg) with results ranging from 316 to 450 µg/kg. Analytical results for two of the confirmation bulk samples (CB-2 and CB-5) were above the EPA standard of 1,000 µg/kg with concentrations of 1,060 (CB-2) and 360,000 µg/kg (CB-5). Post scarification PCB bulk sample results are illustrated on **Figure 4**. The bulk sample PCB laboratory analytical results are provided as **Attachment B**.

Observations during the scarification revealed that the transformer pad concrete appeared to be composed of a bagged concrete type mix (or poorer quality mix) that is likely to be more permeable to oils than a commercially prepared ready-mix concrete, which is a likely explanation for the deeper than typical PCB impacts in the transformer pad at the Site.

Subsequent to receiving the bulk concrete sample results documenting residual PCB impacts, The Brewery Works has decided to initiate complete removal of the concrete pad. AECOM was retained by The Brewery Works on July 19, 2012 to provide services to coordinate the removal and proper disposal of the PCB impacted concrete pad.

AECOM Scope of Services

The PCB remediation activities will be performed in general accordance with 40 Code of Federal Regulations (CFR) 761.61(a) *Self-implementing on-site cleanup and disposal of PCB remediation waste*. AECOM proposes the following scope of services to remediate the documented PCB impacted concrete transformer pad in the building at the Site:

- Retain Clean Harbors Canada Inc. (Clean Harbors) to remove the stained transformer pad concrete contained within the approximately 26 feet by 4.8 feet metal pan on the second floor of the building. The PCB containing waste generated by the cleanup activities will be handled as a Toxic Substance Control Act (TSCA) regulated waste;
- Update the current Site Health and Safety Plan for the Site to cover the proposed PCB remediation and confirmation sampling activities. The plan will include such items as personal protective equipment, contaminant screening methods and limits, emergency procedures, hospital routes, and other safety considerations. The health and safety plan will be in place before the on-Site activities commence;
- AECOM will provide subcontractor oversight during commencement of the concrete removal activities. Clean Harbors will provide for securing the remediation area and air dust monitoring. Note that the work area is located on the second floor in a vacant locked building. Clean Harbors will utilize a pneumatic jack hammer to break up and completely remove the concrete transformer pad (approximately 5.5 inches thick). Clean Harbors will contain the concrete debris within the work area by laying down plastic sheeting and utilize a water mist to suppress dust and prohibit visible emissions in the work area. After removal of the concrete pad, the remaining fine debris will be removed with a commercial vacuum equipped with a high-efficiency particulate air (HEPA) filter. Following vacuuming, the pan will be wiped clean with a PCB cleaning fluid ("Less Than 10"). A wipe sample for PCB analysis will be collected from the pneumatic hammer chisel bit to verify that PCBs are not brought out of the work area on contaminated equipment. The PCB containing waste (concrete, concrete dust, vacuum hoses and filter, plastic sheeting, and spent rags)

generated by the cleanup activities will be handled as a TSCA regulated waste. The remediation waste will be stored in 55-gallon Department of Transportation (DOT) approved drums pending proper disposal at a facility capable of accepting TSCA regulated waste;

- Collect five PCB wipe samples (CW-7 through CW-11; **Figure 5**) from the bottom of the bare metal pan in which the former concrete pad was contained to document that there no residual PCBs remaining beneath the former pad. The post concrete removal confirmation sampling, approximately one per every 25 square feet of the pad, will be spaced out across the length of the former pad as illustrated on **Figure 5**. AECOM will also include one field blank and one replicate sample for laboratory analysis of PCBs. The PCB wipe samples will be transferred under chain of custody and analyzed by a Wisconsin certified laboratory, TestAmerica, Inc. (Chicago, Illinois) by US EPA Method 8082;

AECOM will utilize a new 10 cm by 10 cm acetate mask for each wipe sample. The wipe samples will consist of 10 cm by 10 cm sterile cotton gauze pads wetted by laboratory provided hexane solvent. Each wipe sample will be collected by holding the 100 square cm acetate mask on the surface and wiping the area applying even pressure in a left to right then up and down direction with a hexane moistened gauze pad. Each wipe pad will be placed into a glass jar and the lid securely tightened. The wipe samples will be kept on ice (under chain of custody) pending delivery to the laboratory for analysis;

- Field notes documenting the PCB remediation activities will be taken during the PCB clean up and sampling activities. Notes will include a description of the health and safety topics discussed, contingency actions, sample collection methods, and obtaining field measurements of all sample locations; and
- Preparation of a brief letter report describing the field remediation procedures and confirmation sampling results. This report will be submitted to the EPA Region 5 PCB Coordinator with a copy going to the Wisconsin Department of Natural Resources (WDNR), according to *PCB Remediation in Wisconsin under the One Cleanup Program Memorandum of Agreement* (PUB-RR-786 June 2011). The PCB wipe confirmation sample results will be compared to published US EPA PCB criteria as found in 40 CFR 761.61(Non-porous surfaces-in high occupancy areas), *i.e.* less than 10 µg/100 sq-cm.

We trust that the information contained herein adequately meets your current needs. If you have any questions, please do not hesitate to contact us.

Sincerely yours,



Richard Mazurkiewicz
Senior Hydrogeologist
richard.mazurkiewicz@aecom.com



Kevin L. Brehm, P.E.
Principal/Office Manager
kevin.brehm@aecom.com

Attachments

- Figure 1 – Site Location Map
- Figure 2 – Site Layout Map
- Figure 3 – PCB Post Scarification Wipe Sample Location Map
- Figure 4 – PCB Post Scarification Bulk Sample Location Map

Figure 5 – PCB Impacted Concrete Removal Proposed Wipe Sample Location Map

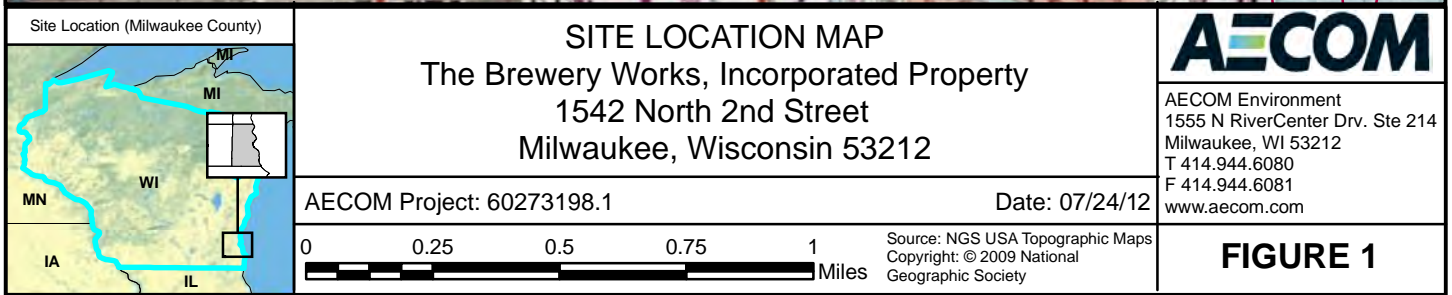
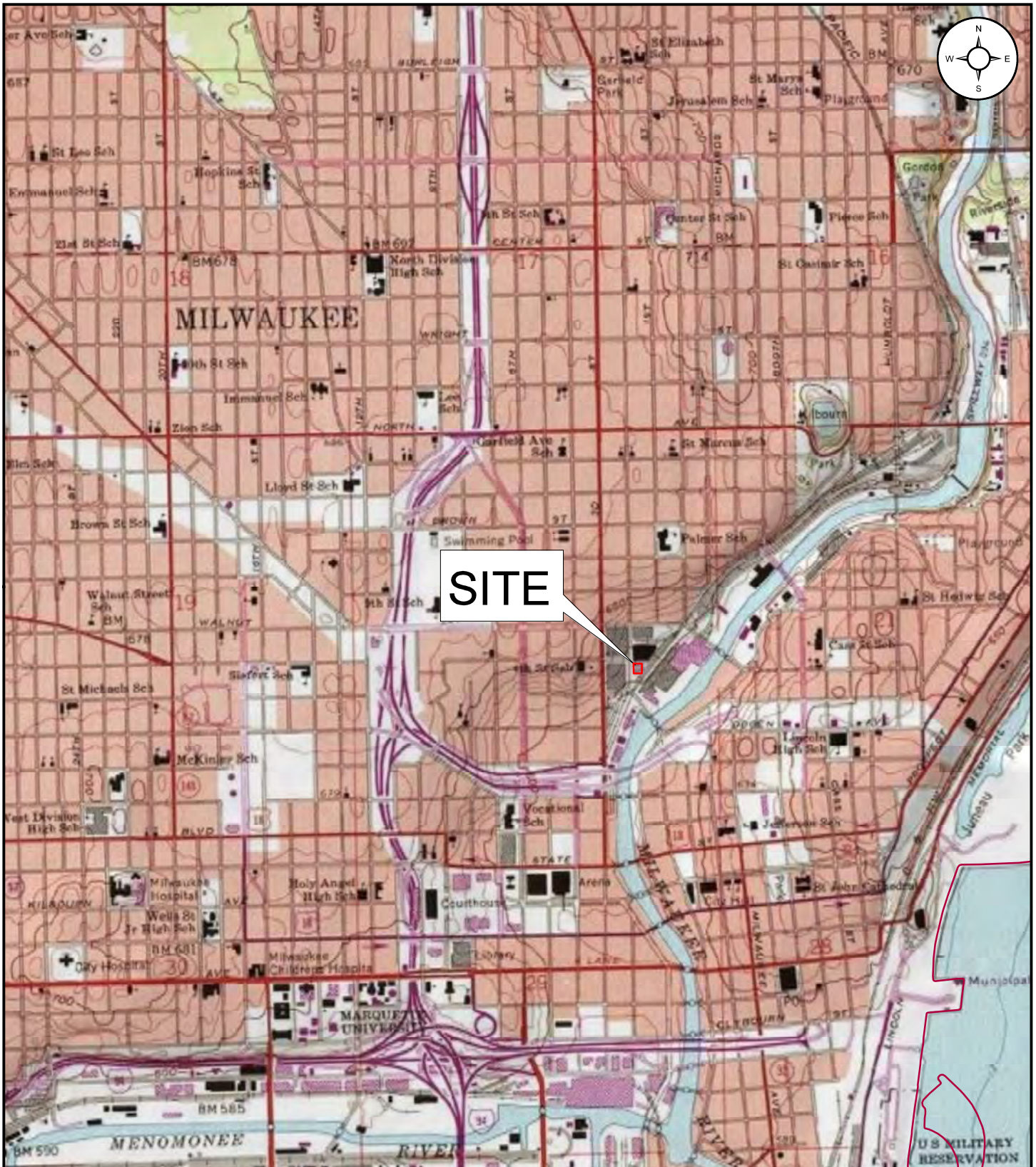
Attachment A – Post Scarification Waste Disposal Documentation

Attachment B – Post Scarification PCB Wipe and Bulk Confirmation Laboratory Results

c: Program Assistant - Wisconsin Department of Natural Resources - Southeast Region

Figures

J:\PROJECTS\60220747 Schlitz Park Brewery A & B\7.0 Deliverables\7.20 CADD-GIS\F1-SLM Schlitz Park 205.mxb - NW 1/4, SE 1/4, SEC 20, T7N, R22E



Attachment A

DOCUMENT NO. 126186

WORK ORDER NO. 74056764

STRAIGHT BILL OF LADING

TRANSPORTER 1
EPA ID #CLEAN HARBORS ENVIRONMENTAL SERVICES
MA0039322250VEHICLE ID # 8826/CH602
TRANS. 1 PHONE 414-745-628TRANSPORTER 2
EPA ID #VEHICLE ID #
TRANS. 2 PHONE

DESIGNATED FACILITY <u>SPRING GROVE RESOURCE RECOVERY</u>			SHIPPER <u>BREWERY WORKS INCORPORATED</u>		
FACILITY EPA ID # <u>OH0000816629</u>			SHIPPER EPA ID # <u>WI000142117</u>		
ADDRESS <u>4879 SPRING GROVE AVE.</u>			ADDRESS <u>1542 NORTH 2ND STREET</u>		
CITY <u>CINCINNATI</u>		STATE <u>OH</u>	ZIP <u>45232</u>	CITY <u>MILWAUKEE</u>	
				STATE <u>WI</u>	
				ZIP <u>53215</u>	
CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
<u>2, 556</u>	<u>DM</u>		<u>A. None, Non Hazardous, NON D.O.T. Regulated, (Polychlorinated Biphenyl), N/A</u>	<u>1000</u>	<u>P</u>
			B.		
			C.		
			D.		
			E.		
			F.		
			G.		
			H.		
SPECIAL HANDLING INSTRUCTIONS <u>Polik #CH531341</u>					

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

SHIPPER	PRINT <u>Sam Denny</u>	SIGN <u>Sam Denny</u>	DATE <u>1-12-12</u>
TRANSPORTER 1	PRINT <u>Mail Bentleys</u>	SIGN <u>MM</u>	DATE <u>1-12-12</u>
TRANSPORTER 2	PRINT	SIGN	DATE
RECEIVED BY	PRINT	SIGN	DATE

Attachment B

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Watertown

1101 Industrial Drive

Watertown, WI 53094

Tel: (920)261-1660

TestAmerica Job ID: 610-1086-1

Client Project/Site: The Brewery Works, Inc. 6022545

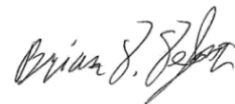
For:

AECOM, Inc.

11425 W. Lake Park Drive

Milwaukee, Wisconsin 53224

Attn: Richard Mazurkiewicz



Authorized for release by:

1/17/2012 3:58:08 PM

Brian DeJong

Project Manager I

brian.dejong@testamericainc.com

Designee for

Dan Milewsky

Project Manager II

dan.milewsky@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Detection Summary	5
Client Sample Results	6
Surrogate Summary	10
QC Sample Results	11
QC Association Summary	12
Lab Chronicle	13
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	19



Definitions/Glossary

Client: AECOM, Inc.

Project/Site: The Brewery Works, Inc. 6022545

TestAmerica Job ID: 610-1086-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: AECOM, Inc.
Project/Site: The Brewery Works, Inc. 6022545

TestAmerica Job ID: 610-1086-1

Job ID: 610-1086-1

Laboratory: TestAmerica Watertown

Narrative

Job Narrative 610-1086-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC Semi VOA

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Detection Summary

Client: AECOM, Inc.
Project/Site: The Brewery Works, Inc. 6022545

TestAmerica Job ID: 610-1086-1

Client Sample ID: CW-1

Lab Sample ID: 610-1086-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.52		0.50	0.077	ug/Wipe	1		8082	Total/NA

Client Sample ID: CW-2

Lab Sample ID: 610-1086-2

No Detections

Client Sample ID: CW-3

Lab Sample ID: 610-1086-3

No Detections

Client Sample ID: CW-4

Lab Sample ID: 610-1086-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	1.1		0.50	0.077	ug/Wipe	1		8082	Total/NA

Client Sample ID: CW-5

Lab Sample ID: 610-1086-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.30	J	0.50	0.077	ug/Wipe	1		8082	Total/NA

Client Sample ID: CW-6

Lab Sample ID: 610-1086-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.76		0.50	0.077	ug/Wipe	1		8082	Total/NA

Client Sample ID: Dup

Lab Sample ID: 610-1086-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	1.3		0.50	0.077	ug/Wipe	1		8082	Total/NA

Client Sample ID: EQ Blank Pre

Lab Sample ID: 610-1086-8

No Detections

Client Sample ID: EQ Blank Post

Lab Sample ID: 610-1086-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	2.0		0.50	0.077	ug/Wipe	1		8082	Total/NA

Client Sample ID: Field Blank

Lab Sample ID: 610-1086-10

No Detections

Client Sample Results

Client: AECOM, Inc.
Project/Site: The Brewery Works, Inc. 6022545

TestAmerica Job ID: 610-1086-1

Client Sample ID: CW-1

Date Collected: 01/12/12 13:03

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-1

Matrix: Wipe

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.050		0.50	0.050	ug/Wipe		01/16/12 10:19	01/17/12 08:47	1
PCB-1221	<0.17		0.50	0.17	ug/Wipe		01/16/12 10:19	01/17/12 08:47	1
PCB-1232	<0.16		0.50	0.16	ug/Wipe		01/16/12 10:19	01/17/12 08:47	1
PCB-1242	<0.13		0.50	0.13	ug/Wipe		01/16/12 10:19	01/17/12 08:47	1
PCB-1248	<0.15		0.50	0.15	ug/Wipe		01/16/12 10:19	01/17/12 08:47	1
PCB-1254	<0.10		0.50	0.10	ug/Wipe		01/16/12 10:19	01/17/12 08:47	1
PCB-1260	0.52		0.50	0.077	ug/Wipe		01/16/12 10:19	01/17/12 08:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		28 - 124				01/16/12 10:19	01/17/12 08:47	1
DCB Decachlorobiphenyl	90		38 - 130				01/16/12 10:19	01/17/12 08:47	1

Client Sample ID: CW-2

Date Collected: 01/12/12 13:20

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-2

Matrix: Wipe

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.050		0.50	0.050	ug/Wipe		01/16/12 10:19	01/17/12 09:01	1
PCB-1221	<0.17		0.50	0.17	ug/Wipe		01/16/12 10:19	01/17/12 09:01	1
PCB-1232	<0.16		0.50	0.16	ug/Wipe		01/16/12 10:19	01/17/12 09:01	1
PCB-1242	<0.13		0.50	0.13	ug/Wipe		01/16/12 10:19	01/17/12 09:01	1
PCB-1248	<0.15		0.50	0.15	ug/Wipe		01/16/12 10:19	01/17/12 09:01	1
PCB-1254	<0.10		0.50	0.10	ug/Wipe		01/16/12 10:19	01/17/12 09:01	1
PCB-1260	<0.077		0.50	0.077	ug/Wipe		01/16/12 10:19	01/17/12 09:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	83		28 - 124				01/16/12 10:19	01/17/12 09:01	1
DCB Decachlorobiphenyl	91		38 - 130				01/16/12 10:19	01/17/12 09:01	1

Client Sample ID: CW-3

Date Collected: 01/12/12 14:00

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-3

Matrix: Wipe

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.050		0.50	0.050	ug/Wipe		01/16/12 10:19	01/17/12 09:15	1
PCB-1221	<0.17		0.50	0.17	ug/Wipe		01/16/12 10:19	01/17/12 09:15	1
PCB-1232	<0.16		0.50	0.16	ug/Wipe		01/16/12 10:19	01/17/12 09:15	1
PCB-1242	<0.13		0.50	0.13	ug/Wipe		01/16/12 10:19	01/17/12 09:15	1
PCB-1248	<0.15		0.50	0.15	ug/Wipe		01/16/12 10:19	01/17/12 09:15	1
PCB-1254	<0.10		0.50	0.10	ug/Wipe		01/16/12 10:19	01/17/12 09:15	1
PCB-1260	<0.077		0.50	0.077	ug/Wipe		01/16/12 10:19	01/17/12 09:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	86		28 - 124				01/16/12 10:19	01/17/12 09:15	1
DCB Decachlorobiphenyl	95		38 - 130				01/16/12 10:19	01/17/12 09:15	1

Client Sample Results

Client: AECOM, Inc.
Project/Site: The Brewery Works, Inc. 6022545

TestAmerica Job ID: 610-1086-1

Client Sample ID: CW-4

Lab Sample ID: 610-1086-4

Date Collected: 01/12/12 14:45

Matrix: Wipe

Date Received: 01/13/12 14:04

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.050		0.50	0.050	ug/Wipe		01/16/12 10:19	01/17/12 09:29	1
PCB-1221	<0.17		0.50	0.17	ug/Wipe		01/16/12 10:19	01/17/12 09:29	1
PCB-1232	<0.16		0.50	0.16	ug/Wipe		01/16/12 10:19	01/17/12 09:29	1
PCB-1242	<0.13		0.50	0.13	ug/Wipe		01/16/12 10:19	01/17/12 09:29	1
PCB-1248	<0.15		0.50	0.15	ug/Wipe		01/16/12 10:19	01/17/12 09:29	1
PCB-1254	<0.10		0.50	0.10	ug/Wipe		01/16/12 10:19	01/17/12 09:29	1
PCB-1260	1.1		0.50	0.077	ug/Wipe		01/16/12 10:19	01/17/12 09:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		28 - 124				01/16/12 10:19	01/17/12 09:29	1
DCB Decachlorobiphenyl	87		38 - 130				01/16/12 10:19	01/17/12 09:29	1

Client Sample ID: CW-5

Lab Sample ID: 610-1086-5

Date Collected: 01/12/12 15:00

Matrix: Wipe

Date Received: 01/13/12 14:04

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.050		0.50	0.050	ug/Wipe		01/16/12 10:19	01/17/12 09:44	1
PCB-1221	<0.17		0.50	0.17	ug/Wipe		01/16/12 10:19	01/17/12 09:44	1
PCB-1232	<0.16		0.50	0.16	ug/Wipe		01/16/12 10:19	01/17/12 09:44	1
PCB-1242	<0.13		0.50	0.13	ug/Wipe		01/16/12 10:19	01/17/12 09:44	1
PCB-1248	<0.15		0.50	0.15	ug/Wipe		01/16/12 10:19	01/17/12 09:44	1
PCB-1254	<0.10		0.50	0.10	ug/Wipe		01/16/12 10:19	01/17/12 09:44	1
PCB-1260	0.30	J	0.50	0.077	ug/Wipe		01/16/12 10:19	01/17/12 09:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	86		28 - 124				01/16/12 10:19	01/17/12 09:44	1
DCB Decachlorobiphenyl	93		38 - 130				01/16/12 10:19	01/17/12 09:44	1

Client Sample ID: CW-6

Lab Sample ID: 610-1086-6

Date Collected: 01/12/12 13:15

Matrix: Wipe

Date Received: 01/13/12 14:04

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.050		0.50	0.050	ug/Wipe		01/16/12 10:19	01/17/12 09:58	1
PCB-1221	<0.17		0.50	0.17	ug/Wipe		01/16/12 10:19	01/17/12 09:58	1
PCB-1232	<0.16		0.50	0.16	ug/Wipe		01/16/12 10:19	01/17/12 09:58	1
PCB-1242	<0.13		0.50	0.13	ug/Wipe		01/16/12 10:19	01/17/12 09:58	1
PCB-1248	<0.15		0.50	0.15	ug/Wipe		01/16/12 10:19	01/17/12 09:58	1
PCB-1254	<0.10		0.50	0.10	ug/Wipe		01/16/12 10:19	01/17/12 09:58	1
PCB-1260	0.76		0.50	0.077	ug/Wipe		01/16/12 10:19	01/17/12 09:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	86		28 - 124				01/16/12 10:19	01/17/12 09:58	1
DCB Decachlorobiphenyl	93		38 - 130				01/16/12 10:19	01/17/12 09:58	1

Client Sample Results

Client: AECOM, Inc.
Project/Site: The Brewery Works, Inc. 6022545

TestAmerica Job ID: 610-1086-1

Client Sample ID: Dup

Date Collected: 01/12/12 00:00

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-7

Matrix: Wipe

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.050		0.50	0.050	ug/Wipe		01/16/12 10:19	01/17/12 10:12	1
PCB-1221	<0.17		0.50	0.17	ug/Wipe		01/16/12 10:19	01/17/12 10:12	1
PCB-1232	<0.16		0.50	0.16	ug/Wipe		01/16/12 10:19	01/17/12 10:12	1
PCB-1242	<0.13		0.50	0.13	ug/Wipe		01/16/12 10:19	01/17/12 10:12	1
PCB-1248	<0.15		0.50	0.15	ug/Wipe		01/16/12 10:19	01/17/12 10:12	1
PCB-1254	<0.10		0.50	0.10	ug/Wipe		01/16/12 10:19	01/17/12 10:12	1
PCB-1260	1.3		0.50	0.077	ug/Wipe		01/16/12 10:19	01/17/12 10:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	86		28 - 124				01/16/12 10:19	01/17/12 10:12	1
DCB Decachlorobiphenyl	88		38 - 130				01/16/12 10:19	01/17/12 10:12	1

Client Sample ID: EQ Blank Pre

Date Collected: 01/12/12 07:50

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-8

Matrix: Wipe

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.050		0.50	0.050	ug/Wipe		01/16/12 10:19	01/17/12 10:26	1
PCB-1221	<0.17		0.50	0.17	ug/Wipe		01/16/12 10:19	01/17/12 10:26	1
PCB-1232	<0.16		0.50	0.16	ug/Wipe		01/16/12 10:19	01/17/12 10:26	1
PCB-1242	<0.13		0.50	0.13	ug/Wipe		01/16/12 10:19	01/17/12 10:26	1
PCB-1248	<0.15		0.50	0.15	ug/Wipe		01/16/12 10:19	01/17/12 10:26	1
PCB-1254	<0.10		0.50	0.10	ug/Wipe		01/16/12 10:19	01/17/12 10:26	1
PCB-1260	<0.077		0.50	0.077	ug/Wipe		01/16/12 10:19	01/17/12 10:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		28 - 124				01/16/12 10:19	01/17/12 10:26	1
DCB Decachlorobiphenyl	91		38 - 130				01/16/12 10:19	01/17/12 10:26	1

Client Sample ID: EQ Blank Post

Date Collected: 01/12/12 12:55

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-9

Matrix: Wipe

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.050		0.50	0.050	ug/Wipe		01/16/12 10:19	01/17/12 10:40	1
PCB-1221	<0.17		0.50	0.17	ug/Wipe		01/16/12 10:19	01/17/12 10:40	1
PCB-1232	<0.16		0.50	0.16	ug/Wipe		01/16/12 10:19	01/17/12 10:40	1
PCB-1242	<0.13		0.50	0.13	ug/Wipe		01/16/12 10:19	01/17/12 10:40	1
PCB-1248	<0.15		0.50	0.15	ug/Wipe		01/16/12 10:19	01/17/12 10:40	1
PCB-1254	<0.10		0.50	0.10	ug/Wipe		01/16/12 10:19	01/17/12 10:40	1
PCB-1260	2.0		0.50	0.077	ug/Wipe		01/16/12 10:19	01/17/12 10:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	86		28 - 124				01/16/12 10:19	01/17/12 10:40	1
DCB Decachlorobiphenyl	95		38 - 130				01/16/12 10:19	01/17/12 10:40	1

Client Sample Results

Client: AECOM, Inc.
Project/Site: The Brewery Works, Inc. 6022545

TestAmerica Job ID: 610-1086-1

Client Sample ID: Field Blank

Lab Sample ID: 610-1086-10

Date Collected: 01/12/12 12:03

Matrix: Wipe

Date Received: 01/13/12 14:04

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.050		0.50	0.050	ug/Wipe		01/16/12 10:19	01/17/12 10:54	1
PCB-1221	<0.17		0.50	0.17	ug/Wipe		01/16/12 10:19	01/17/12 10:54	1
PCB-1232	<0.16		0.50	0.16	ug/Wipe		01/16/12 10:19	01/17/12 10:54	1
PCB-1242	<0.13		0.50	0.13	ug/Wipe		01/16/12 10:19	01/17/12 10:54	1
PCB-1248	<0.15		0.50	0.15	ug/Wipe		01/16/12 10:19	01/17/12 10:54	1
PCB-1254	<0.10		0.50	0.10	ug/Wipe		01/16/12 10:19	01/17/12 10:54	1
PCB-1260	<0.077		0.50	0.077	ug/Wipe		01/16/12 10:19	01/17/12 10:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		28 - 124				01/16/12 10:19	01/17/12 10:54	1
DCB Decachlorobiphenyl	95		38 - 130				01/16/12 10:19	01/17/12 10:54	1

Surrogate Summary

Client: AECOM, Inc.

TestAmerica Job ID: 610-1086-1

Project/Site: The Brewery Works, Inc. 6022545

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Wipe

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (28-124)	DCB1 (38-130)
610-1086-1	CW-1	87	90
610-1086-2	CW-2	83	91
610-1086-3	CW-3	86	95
610-1086-4	CW-4	85	87
610-1086-5	CW-5	86	93
610-1086-6	CW-6	86	93
610-1086-7	Dup	86	88
610-1086-8	EQ Blank Pre	85	91
610-1086-9	EQ Blank Post	86	95
610-1086-10	Field Blank	87	95
LCS 500-138116/2-A	Lab Control Sample	86	90
LCSD 500-138116/3-A	Lab Control Sample Dup	87	87
MB 500-138116/1-A	Method Blank	89	96

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: AECOM, Inc.
Project/Site: The Brewery Works, Inc. 6022545

TestAmerica Job ID: 610-1086-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-138116/1-A

Matrix: Wipe

Analysis Batch: 138220

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 138116

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.050		0.50	0.050	ug/Wipe		01/16/12 10:19	01/17/12 08:04	1
PCB-1221	<0.17		0.50	0.17	ug/Wipe		01/16/12 10:19	01/17/12 08:04	1
PCB-1232	<0.16		0.50	0.16	ug/Wipe		01/16/12 10:19	01/17/12 08:04	1
PCB-1242	<0.13		0.50	0.13	ug/Wipe		01/16/12 10:19	01/17/12 08:04	1
PCB-1248	<0.15		0.50	0.15	ug/Wipe		01/16/12 10:19	01/17/12 08:04	1
PCB-1254	<0.10		0.50	0.10	ug/Wipe		01/16/12 10:19	01/17/12 08:04	1
PCB-1260	<0.077		0.50	0.077	ug/Wipe		01/16/12 10:19	01/17/12 08:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	89		28 - 124	01/16/12 10:19	01/17/12 08:04	1
DCB Decachlorobiphenyl	96		38 - 130	01/16/12 10:19	01/17/12 08:04	1

Lab Sample ID: LCS 500-138116/2-A

Matrix: Wipe

Analysis Batch: 138220

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 138116

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	5.00	4.63		ug/Wipe		93	47 - 117
PCB-1260	5.00	4.93		ug/Wipe		99	57 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	86		28 - 124
DCB Decachlorobiphenyl	90		38 - 130

Lab Sample ID: LCSD 500-138116/3-A

Matrix: Wipe

Analysis Batch: 138220

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 138116

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
PCB-1016	5.00	4.64		ug/Wipe		93	47 - 117	0	30
PCB-1260	5.00	4.91		ug/Wipe		98	57 - 122	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	87		28 - 124
DCB Decachlorobiphenyl	87		38 - 130

QC Association Summary

Client: AECOM, Inc.
Project/Site: The Brewery Works, Inc. 6022545

TestAmerica Job ID: 610-1086-1

GC Semi VOA

Prep Batch: 138116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
610-1086-1	CW-1	Total/NA	Wipe	3550B	
610-1086-2	CW-2	Total/NA	Wipe	3550B	
610-1086-3	CW-3	Total/NA	Wipe	3550B	
610-1086-4	CW-4	Total/NA	Wipe	3550B	
610-1086-5	CW-5	Total/NA	Wipe	3550B	
610-1086-6	CW-6	Total/NA	Wipe	3550B	
610-1086-7	Dup	Total/NA	Wipe	3550B	
610-1086-8	EQ Blank Pre	Total/NA	Wipe	3550B	
610-1086-9	EQ Blank Post	Total/NA	Wipe	3550B	
610-1086-10	Field Blank	Total/NA	Wipe	3550B	
LCS 500-138116/2-A	Lab Control Sample	Total/NA	Wipe	3550B	
LCSD 500-138116/3-A	Lab Control Sample Dup	Total/NA	Wipe	3550B	
MB 500-138116/1-A	Method Blank	Total/NA	Wipe	3550B	

Analysis Batch: 138220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
610-1086-1	CW-1	Total/NA	Wipe	8082	138116
610-1086-2	CW-2	Total/NA	Wipe	8082	138116
610-1086-3	CW-3	Total/NA	Wipe	8082	138116
610-1086-4	CW-4	Total/NA	Wipe	8082	138116
610-1086-5	CW-5	Total/NA	Wipe	8082	138116
610-1086-6	CW-6	Total/NA	Wipe	8082	138116
610-1086-7	Dup	Total/NA	Wipe	8082	138116
610-1086-8	EQ Blank Pre	Total/NA	Wipe	8082	138116
610-1086-9	EQ Blank Post	Total/NA	Wipe	8082	138116
610-1086-10	Field Blank	Total/NA	Wipe	8082	138116
LCS 500-138116/2-A	Lab Control Sample	Total/NA	Wipe	8082	138116
LCSD 500-138116/3-A	Lab Control Sample Dup	Total/NA	Wipe	8082	138116
MB 500-138116/1-A	Method Blank	Total/NA	Wipe	8082	138116

Lab Chronicle

Client: AECOM, Inc.
Project/Site: The Brewery Works, Inc. 6022545

TestAmerica Job ID: 610-1086-1

Client Sample ID: CW-1

Date Collected: 01/12/12 13:03

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-1

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138116	01/16/12 10:19	DAK	TAL CHI
Total/NA	Analysis	8082		1	138220	01/17/12 08:47	GMO	TAL CHI

Client Sample ID: CW-2

Date Collected: 01/12/12 13:20

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-2

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138116	01/16/12 10:19	DAK	TAL CHI
Total/NA	Analysis	8082		1	138220	01/17/12 09:01	GMO	TAL CHI

Client Sample ID: CW-3

Date Collected: 01/12/12 14:00

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-3

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138116	01/16/12 10:19	DAK	TAL CHI
Total/NA	Analysis	8082		1	138220	01/17/12 09:15	GMO	TAL CHI

Client Sample ID: CW-4

Date Collected: 01/12/12 14:45

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-4

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138116	01/16/12 10:19	DAK	TAL CHI
Total/NA	Analysis	8082		1	138220	01/17/12 09:29	GMO	TAL CHI

Client Sample ID: CW-5

Date Collected: 01/12/12 15:00

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-5

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138116	01/16/12 10:19	DAK	TAL CHI
Total/NA	Analysis	8082		1	138220	01/17/12 09:44	GMO	TAL CHI

Client Sample ID: CW-6

Date Collected: 01/12/12 13:15

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-6

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138116	01/16/12 10:19	DAK	TAL CHI
Total/NA	Analysis	8082		1	138220	01/17/12 09:58	GMO	TAL CHI

Lab Chronicle

Client: AECOM, Inc.
Project/Site: The Brewery Works, Inc. 6022545

TestAmerica Job ID: 610-1086-1

Client Sample ID: Dup

Date Collected: 01/12/12 00:00

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-7

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138116	01/16/12 10:19	DAK	TAL CHI
Total/NA	Analysis	8082		1	138220	01/17/12 10:12	GMO	TAL CHI

Client Sample ID: EQ Blank Pre

Date Collected: 01/12/12 07:50

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-8

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138116	01/16/12 10:19	DAK	TAL CHI
Total/NA	Analysis	8082		1	138220	01/17/12 10:26	GMO	TAL CHI

Client Sample ID: EQ Blank Post

Date Collected: 01/12/12 12:55

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-9

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138116	01/16/12 10:19	DAK	TAL CHI
Total/NA	Analysis	8082		1	138220	01/17/12 10:40	GMO	TAL CHI

Client Sample ID: Field Blank

Date Collected: 01/12/12 12:03

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1086-10

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138116	01/16/12 10:19	DAK	TAL CHI
Total/NA	Analysis	8082		1	138220	01/17/12 10:54	GMO	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Certification Summary

Client: AECOM, Inc.

TestAmerica Job ID: 610-1086-1

Project/Site: The Brewery Works, Inc. 6022545

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Watertown		WI Dept of Agriculture (Micro)		105-266
TestAmerica Watertown	Illinois	NELAC	5	100453
TestAmerica Watertown	Wisconsin	State Program	5	128053530
TestAmerica Chicago	Alabama	State Program	4	40461
TestAmerica Chicago	California	NELAC	9	01132CA
TestAmerica Chicago	Florida	NELAC	4	E871072
TestAmerica Chicago	Georgia	Georgia EPD	4	N/A
TestAmerica Chicago	Georgia	State Program	4	939
TestAmerica Chicago	Hawaii	State Program	9	N/A
TestAmerica Chicago	Illinois	NELAC	5	100201
TestAmerica Chicago	Indiana	State Program	5	C-IL-02
TestAmerica Chicago	Iowa	State Program	7	82
TestAmerica Chicago	Kansas	NELAC	7	E-10161
TestAmerica Chicago	Kentucky	Kentucky UST	4	66
TestAmerica Chicago	Kentucky	State Program	4	90023
TestAmerica Chicago	L-A-B	DoD ELAP		L2304
TestAmerica Chicago	L-A-B	ISO/IEC 17025		L2304
TestAmerica Chicago	Louisiana	NELAC	6	30720
TestAmerica Chicago	Massachusetts	State Program	1	M-IL035
TestAmerica Chicago	Mississippi	State Program	4	N/A
TestAmerica Chicago	North Carolina	North Carolina DENR	4	291
TestAmerica Chicago	Oklahoma	State Program	6	8908
TestAmerica Chicago	South Carolina	State Program	4	77001
TestAmerica Chicago	Texas	NELAC	6	T104704252-09-TX
TestAmerica Chicago	USDA	USDA		P330-09-00027
TestAmerica Chicago	Virginia	NELAC Secondary AB	3	460142
TestAmerica Chicago	Wisconsin	State Program	5	999580010
TestAmerica Chicago	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: AECOM, Inc.

TestAmerica Job ID: 610-1086-1

Project/Site: The Brewery Works, Inc. 6022545

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: AECOM, Inc.

TestAmerica Job ID: 610-1086-1

Project/Site: The Brewery Works, Inc. 6022545

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
610-1086-1	CW-1	Wipe	01/12/12 13:03	01/13/12 14:04
610-1086-2	CW-2	Wipe	01/12/12 13:20	01/13/12 14:04
610-1086-3	CW-3	Wipe	01/12/12 14:00	01/13/12 14:04
610-1086-4	CW-4	Wipe	01/12/12 14:45	01/13/12 14:04
610-1086-5	CW-5	Wipe	01/12/12 15:00	01/13/12 14:04
610-1086-6	CW-6	Wipe	01/12/12 13:15	01/13/12 14:04
610-1086-7	Dup	Wipe	01/12/12 00:00	01/13/12 14:04
610-1086-8	EQ Blank Pre	Wipe	01/12/12 07:50	01/13/12 14:04
610-1086-9	EQ Blank Post	Wipe	01/12/12 12:55	01/13/12 14:04
610-1086-10	Field Blank	Wipe	01/12/12 12:03	01/13/12 14:04

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING
Client Name

Watertown Division
602 Commerce Drive
Watertown, WI 53094

Phone 920-261-1660 or 800-833-7036
Fax 920-261-8120

AECOM

Address: 11425 W Lake Park Drive
City/State/Zip Code: Milwaukee, WI 53224

Project Manager: Ric Maz
Telephone Number: 414 577 1335 Fax: 414 359 0822

Sampler Name: (Print Name) Ric Maz
Sampler Signature: *Ric Maz*

E-mail address:

Project Name: The Brewery Works, Inc.
Project #: 6022 S4S
Site/Location ID: 1542 N 2nd St Milwaukee State: WI
Report To: Ric Maz
Invoice To: " "
Quote #: PO#:

To assist us in using the proper analytical methods,
is this work being conducted for regulatory purposes?
Compliance Monitoring

TAT Standard	Date Needed:	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix	Preservation & # of Containers						Analyze For:	QC Deliverables	REMARKS	
							SL - Sludge	GW - Groundwater	SW - Surface Water	Other (Specify)	HNO ₃	HCl				NaOH
CW-1		1/12/12	1:03	G	—	Wipe										
CW-2			1:20													
CW-3			2:00													
CW-4			2:45													
CW-5			3:00													
CW-6			1:15													
DUP																
EQ Blank pre			7:50													
EQ Blank post			12:55													
Field Blank			12:03													
Special Instructions: Rough sample results (3-day turn)																
Relinquished By: Ric Maz	Date: 1/13/12	Time: 12:15 PM	Received By: <i>[Signature]</i>	Date: 1/13	Time: 10:18											
Relinquished By: <i>[Signature]</i>	Date: 1/13	Time: 12:55	Received By: Danica H	Date: 1/13	Time: 1404											
Relinquished By:	Date:	Time:	Received By:	Date:	Time:											
LABORATORY COMMENTS:				Init Lab Temp: 3.8°C												
Rec Lab Temp:				Custody Seals: N N/A												
Bottles Supplied by TestAmerica: N				Method of Shipment: TA												

TAL-0020 (1207)

Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 610-1086-1

Login Number: 1086

List Source: TestAmerica Watertown

List Number: 1

Creator: Herritz, Danica

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Number of containers are not listed on COC.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 610-1086-1

Login Number: 1086

List Number: 1

Creator: Lunt, Jeff T

List Source: TestAmerica Chicago

List Creation: 01/14/12 10:45 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Watertown

1101 Industrial Drive

Watertown, WI 53094

Tel: (920)261-1660

TestAmerica Job ID: 610-1084-1

Client Project/Site: The Brewery Works, Inc. 60225451

For:

AECOM, Inc.

11425 W. Lake Park Drive

Milwaukee, Wisconsin 53224

Attn: Richard Mazurkiewicz



Authorized for release by:

1/18/2012 4:07:54 PM

Sandie Fredrick

Project Manager I

sandie.fredrick@testamericainc.com

Designee for

Dan Milewsky

Project Manager II

dan.milewsky@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Detection Summary	5
Client Sample Results	6
Surrogate Summary	8
QC Sample Results	9
QC Association Summary	10
Lab Chronicle	11
Certification Summary	13
Method Summary	14
Sample Summary	15
Chain of Custody	16
Receipt Checklists	17



Definitions/Glossary

Client: AECOM, Inc.

Project/Site: The Brewery Works, Inc. 60225451

TestAmerica Job ID: 610-1084-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: AECOM, Inc.
Project/Site: The Brewery Works, Inc. 60225451

TestAmerica Job ID: 610-1084-1

Job ID: 610-1084-1

Laboratory: TestAmerica Watertown

Narrative

Job Narrative 610-1084-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC Semi VOA

Method(s) 8082: The following samples were diluted due to the abundance of target analytes: CB-5 (610-1084-5), CB-5 (610-1084-5 MS), CB-5 (610-1084-5 MSD), Dup (610-1084-6). Elevated reporting limits (RLs) are provided.

Method(s) 8082: Due to the high concentration of AR1254 and AR1260, the matrix spike / matrix spike duplicate (MS/MSD) for batch 138094 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 8082: Due to the level of dilution required for the following samples, surrogate recoveries are not reported: CB-5 (610-1084-5), CB-5 (610-1084-5 MS), CB-5 (610-1084-5 MSD), Dup (610-1084-6).

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Detection Summary

Client: AECOM, Inc.

TestAmerica Job ID: 610-1084-1

Project/Site: The Brewery Works, Inc. 60225451

Client Sample ID: CB-1

Lab Sample ID: 610-1084-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	310		24	6.3	ug/Kg	1		8082	Total/NA

Client Sample ID: CB-2

Lab Sample ID: 610-1084-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	640		32	8.4	ug/Kg	1		8082	Total/NA
PCB-1260	420		32	9.9	ug/Kg	1		8082	Total/NA

Client Sample ID: CB-3

Lab Sample ID: 610-1084-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	240		34	8.9	ug/Kg	1		8082	Total/NA
PCB-1260	120		34	10	ug/Kg	1		8082	Total/NA

Client Sample ID: CB-4

Lab Sample ID: 610-1084-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	280		33	8.6	ug/Kg	1		8082	Total/NA
PCB-1260	170		33	10	ug/Kg	1		8082	Total/NA

Client Sample ID: CB-5

Lab Sample ID: 610-1084-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	110000		32000	8500	ug/Kg	1000		8082	Total/NA
PCB-1260	270000		32000	10000	ug/Kg	1000		8082	Total/NA

Client Sample ID: Dup

Lab Sample ID: 610-1084-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	190000		33000	8800	ug/Kg	1000		8082	Total/NA
PCB-1260	250000		33000	10000	ug/Kg	1000		8082	Total/NA

Client Sample Results

Client: AECOM, Inc.

TestAmerica Job ID: 610-1084-1

Project/Site: The Brewery Works, Inc. 60225451

Client Sample ID: CB-1

Lab Sample ID: 610-1084-1

Date Collected: 01/12/12 15:15

Matrix: Solid

Date Received: 01/13/12 14:04

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<9.9		24	9.9	ug/Kg		01/16/12 09:33	01/17/12 11:51	1
PCB-1221	<6.9		24	6.9	ug/Kg		01/16/12 09:33	01/17/12 11:51	1
PCB-1232	<4.2		24	4.2	ug/Kg		01/16/12 09:33	01/17/12 11:51	1
PCB-1242	<4.6		24	4.6	ug/Kg		01/16/12 09:33	01/17/12 11:51	1
PCB-1248	<5.0		24	5.0	ug/Kg		01/16/12 09:33	01/17/12 11:51	1
PCB-1254	310		24	6.3	ug/Kg		01/16/12 09:33	01/17/12 11:51	1
PCB-1260	<7.4		24	7.4	ug/Kg		01/16/12 09:33	01/17/12 11:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	58		28 - 124				01/16/12 09:33	01/17/12 11:51	1
DCB Decachlorobiphenyl	73		38 - 130				01/16/12 09:33	01/17/12 11:51	1

Client Sample ID: CB-2

Lab Sample ID: 610-1084-2

Date Collected: 01/12/12 15:30

Matrix: Solid

Date Received: 01/13/12 14:04

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<13		32	13	ug/Kg		01/16/12 09:33	01/17/12 12:06	1
PCB-1221	<9.2		32	9.2	ug/Kg		01/16/12 09:33	01/17/12 12:06	1
PCB-1232	<5.5		32	5.5	ug/Kg		01/16/12 09:33	01/17/12 12:06	1
PCB-1242	<6.1		32	6.1	ug/Kg		01/16/12 09:33	01/17/12 12:06	1
PCB-1248	<6.7		32	6.7	ug/Kg		01/16/12 09:33	01/17/12 12:06	1
PCB-1254	640		32	8.4	ug/Kg		01/16/12 09:33	01/17/12 12:06	1
PCB-1260	420		32	9.9	ug/Kg		01/16/12 09:33	01/17/12 12:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	65		28 - 124				01/16/12 09:33	01/17/12 12:06	1
DCB Decachlorobiphenyl	77		38 - 130				01/16/12 09:33	01/17/12 12:06	1

Client Sample ID: CB-3

Lab Sample ID: 610-1084-3

Date Collected: 01/12/12 15:45

Matrix: Solid

Date Received: 01/13/12 14:04

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<14		34	14	ug/Kg		01/16/12 09:33	01/17/12 12:20	1
PCB-1221	<9.7		34	9.7	ug/Kg		01/16/12 09:33	01/17/12 12:20	1
PCB-1232	<5.8		34	5.8	ug/Kg		01/16/12 09:33	01/17/12 12:20	1
PCB-1242	<6.4		34	6.4	ug/Kg		01/16/12 09:33	01/17/12 12:20	1
PCB-1248	<7.0		34	7.0	ug/Kg		01/16/12 09:33	01/17/12 12:20	1
PCB-1254	240		34	8.9	ug/Kg		01/16/12 09:33	01/17/12 12:20	1
PCB-1260	120		34	10	ug/Kg		01/16/12 09:33	01/17/12 12:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		28 - 124				01/16/12 09:33	01/17/12 12:20	1
DCB Decachlorobiphenyl	87		38 - 130				01/16/12 09:33	01/17/12 12:20	1

Client Sample Results

Client: AECOM, Inc.

TestAmerica Job ID: 610-1084-1

Project/Site: The Brewery Works, Inc. 60225451

Client Sample ID: CB-4

Lab Sample ID: 610-1084-4

Date Collected: 01/12/12 16:00

Matrix: Solid

Date Received: 01/13/12 14:04

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<13		33	13	ug/Kg		01/16/12 09:33	01/17/12 12:34	1
PCB-1221	<9.4		33	9.4	ug/Kg		01/16/12 09:33	01/17/12 12:34	1
PCB-1232	<5.7		33	5.7	ug/Kg		01/16/12 09:33	01/17/12 12:34	1
PCB-1242	<6.3		33	6.3	ug/Kg		01/16/12 09:33	01/17/12 12:34	1
PCB-1248	<6.8		33	6.8	ug/Kg		01/16/12 09:33	01/17/12 12:34	1
PCB-1254	280		33	8.6	ug/Kg		01/16/12 09:33	01/17/12 12:34	1
PCB-1260	170		33	10	ug/Kg		01/16/12 09:33	01/17/12 12:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		28 - 124	01/16/12 09:33	01/17/12 12:34	1
DCB Decachlorobiphenyl	79		38 - 130	01/16/12 09:33	01/17/12 12:34	1

Client Sample ID: CB-5

Lab Sample ID: 610-1084-5

Date Collected: 01/12/12 16:15

Matrix: Solid

Date Received: 01/13/12 14:04

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<13000		32000	13000	ug/Kg		01/16/12 09:33	01/18/12 09:33	1000
PCB-1221	<9300		32000	9300	ug/Kg		01/16/12 09:33	01/18/12 09:33	1000
PCB-1232	<5600		32000	5600	ug/Kg		01/16/12 09:33	01/18/12 09:33	1000
PCB-1242	<6200		32000	6200	ug/Kg		01/16/12 09:33	01/18/12 09:33	1000
PCB-1248	<6800		32000	6800	ug/Kg		01/16/12 09:33	01/18/12 09:33	1000
PCB-1254	110000		32000	8500	ug/Kg		01/16/12 09:33	01/18/12 09:33	1000
PCB-1260	270000		32000	10000	ug/Kg		01/16/12 09:33	01/18/12 09:33	1000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	28 - 124	01/16/12 09:33	01/18/12 09:33	1000
DCB Decachlorobiphenyl	0	D	38 - 130	01/16/12 09:33	01/18/12 09:33	1000

Client Sample ID: Dup

Lab Sample ID: 610-1084-6

Date Collected: 01/12/12 00:00

Matrix: Solid

Date Received: 01/13/12 14:04

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<14000		33000	14000	ug/Kg		01/16/12 09:33	01/18/12 10:16	1000
PCB-1221	<9600		33000	9600	ug/Kg		01/16/12 09:33	01/18/12 10:16	1000
PCB-1232	<5800		33000	5800	ug/Kg		01/16/12 09:33	01/18/12 10:16	1000
PCB-1242	<6400		33000	6400	ug/Kg		01/16/12 09:33	01/18/12 10:16	1000
PCB-1248	<7000		33000	7000	ug/Kg		01/16/12 09:33	01/18/12 10:16	1000
PCB-1254	190000		33000	8800	ug/Kg		01/16/12 09:33	01/18/12 10:16	1000
PCB-1260	250000		33000	10000	ug/Kg		01/16/12 09:33	01/18/12 10:16	1000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	D	28 - 124	01/16/12 09:33	01/18/12 10:16	1000
DCB Decachlorobiphenyl	0	D	38 - 130	01/16/12 09:33	01/18/12 10:16	1000

Surrogate Summary

Client: AECOM, Inc.

TestAmerica Job ID: 610-1084-1

Project/Site: The Brewery Works, Inc. 60225451

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (28-124)	DCB1 (38-130)
610-1084-1	CB-1	58	73
610-1084-2	CB-2	65	77
610-1084-3	CB-3	74	87
610-1084-4	CB-4	68	79
610-1084-5	CB-5	0 D	0 D
610-1084-5 MS	CB-5	0 D	0 D
610-1084-5 MSD	CB-5	0 D	0 D
610-1084-6	Dup	0 D	0 D
LCS 500-138094/2-A	Lab Control Sample	80	103
MB 500-138094/1-A	Method Blank	86	106

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: AECOM, Inc.

TestAmerica Job ID: 610-1084-1

Project/Site: The Brewery Works, Inc. 60225451

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 500-138094/1-A

Matrix: Solid

Analysis Batch: 138220

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 138094

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.9		17	6.9	ug/Kg		01/16/12 09:33	01/17/12 11:23	1
PCB-1221	<4.8		17	4.8	ug/Kg		01/16/12 09:33	01/17/12 11:23	1
PCB-1232	<2.9		17	2.9	ug/Kg		01/16/12 09:33	01/17/12 11:23	1
PCB-1242	<3.2		17	3.2	ug/Kg		01/16/12 09:33	01/17/12 11:23	1
PCB-1248	<3.5		17	3.5	ug/Kg		01/16/12 09:33	01/17/12 11:23	1
PCB-1254	<4.4		17	4.4	ug/Kg		01/16/12 09:33	01/17/12 11:23	1
PCB-1260	<5.2		17	5.2	ug/Kg		01/16/12 09:33	01/17/12 11:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	86		28 - 124	01/16/12 09:33	01/17/12 11:23	1
DCB Decachlorobiphenyl	106		38 - 130	01/16/12 09:33	01/17/12 11:23	1

Lab Sample ID: LCS 500-138094/2-A

Matrix: Solid

Analysis Batch: 138220

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 138094

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	167	145		ug/Kg		87	47 - 117
PCB-1260	167	162		ug/Kg		97	57 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	80		28 - 124
DCB Decachlorobiphenyl	103		38 - 130

Lab Sample ID: 610-1084-5 MS

Matrix: Solid

Analysis Batch: 138220

Client Sample ID: CB-5

Prep Type: Total/NA

Prep Batch: 138094

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	<13000		739	<31000		ug/Kg		NC	47 - 117
PCB-1260	270000		739	247000	4	ug/Kg		-3601	57 - 122

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	0	D	28 - 124
DCB Decachlorobiphenyl	0	D	38 - 130

Lab Sample ID: 610-1084-5 MSD

Matrix: Solid

Analysis Batch: 138220

Client Sample ID: CB-5

Prep Type: Total/NA

Prep Batch: 138094

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	<13000		594	<25000		ug/Kg		NC	47 - 117	NC	30
PCB-1260	270000		594	286000	4	ug/Kg		2032	57 - 122	15	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	0	D	28 - 124
DCB Decachlorobiphenyl	0	D	38 - 130

QC Association Summary

Client: AECOM, Inc.

TestAmerica Job ID: 610-1084-1

Project/Site: The Brewery Works, Inc. 60225451

GC Semi VOA

Prep Batch: 138094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
610-1084-1	CB-1	Total/NA	Solid	3550B	
610-1084-2	CB-2	Total/NA	Solid	3550B	
610-1084-3	CB-3	Total/NA	Solid	3550B	
610-1084-4	CB-4	Total/NA	Solid	3550B	
610-1084-5	CB-5	Total/NA	Solid	3550B	
610-1084-5 MS	CB-5	Total/NA	Solid	3550B	
610-1084-5 MSD	CB-5	Total/NA	Solid	3550B	
610-1084-6	Dup	Total/NA	Solid	3550B	
LCS 500-138094/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 500-138094/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 138220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
610-1084-1	CB-1	Total/NA	Solid	8082	138094
610-1084-2	CB-2	Total/NA	Solid	8082	138094
610-1084-3	CB-3	Total/NA	Solid	8082	138094
610-1084-4	CB-4	Total/NA	Solid	8082	138094
610-1084-5	CB-5	Total/NA	Solid	8082	138094
610-1084-5 MS	CB-5	Total/NA	Solid	8082	138094
610-1084-5 MSD	CB-5	Total/NA	Solid	8082	138094
610-1084-6	Dup	Total/NA	Solid	8082	138094
LCS 500-138094/2-A	Lab Control Sample	Total/NA	Solid	8082	138094
MB 500-138094/1-A	Method Blank	Total/NA	Solid	8082	138094

General Chemistry

Analysis Batch: 138027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
610-1084-2	CB-2	Total/NA	Solid	Moisture	
610-1084-3	CB-3	Total/NA	Solid	Moisture	
610-1084-4	CB-4	Total/NA	Solid	Moisture	
610-1084-5	CB-5	Total/NA	Solid	Moisture	
610-1084-5 DU	CB-5	Total/NA	Solid	Moisture	
610-1084-5 MS	CB-5	Total/NA	Solid	Moisture	
610-1084-5 MSD	CB-5	Total/NA	Solid	Moisture	
610-1084-6	Dup	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM, Inc.
Project/Site: The Brewery Works, Inc. 60225451

TestAmerica Job ID: 610-1084-1

Client Sample ID: CB-1

Date Collected: 01/12/12 15:15

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1084-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138094	01/16/12 09:33	DAK	TAL CHI
Total/NA	Analysis	8082		1	138220	01/17/12 11:51	GMO	TAL CHI

Client Sample ID: CB-2

Date Collected: 01/12/12 15:30

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1084-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138094	01/16/12 09:33	DAK	TAL CHI
Total/NA	Analysis	8082		1	138220	01/17/12 12:06	GMO	TAL CHI
Total/NA	Analysis	Moisture		1	138027	01/14/12 13:03	CMV	TAL CHI

Client Sample ID: CB-3

Date Collected: 01/12/12 15:45

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1084-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138094	01/16/12 09:33	DAK	TAL CHI
Total/NA	Analysis	8082		1	138220	01/17/12 12:20	GMO	TAL CHI
Total/NA	Analysis	Moisture		1	138027	01/14/12 13:03	CMV	TAL CHI

Client Sample ID: CB-4

Date Collected: 01/12/12 16:00

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1084-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138094	01/16/12 09:33	DAK	TAL CHI
Total/NA	Analysis	8082		1	138220	01/17/12 12:34	GMO	TAL CHI
Total/NA	Analysis	Moisture		1	138027	01/14/12 13:03	CMV	TAL CHI

Client Sample ID: CB-5

Date Collected: 01/12/12 16:15

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1084-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138094	01/16/12 09:33	DAK	TAL CHI
Total/NA	Analysis	8082		1000	138220	01/18/12 09:33	GMO	TAL CHI
Total/NA	Analysis	Moisture		1	138027	01/14/12 13:03	CMV	TAL CHI

Lab Chronicle

Client: AECOM, Inc.
Project/Site: The Brewery Works, Inc. 60225451

TestAmerica Job ID: 610-1084-1

Client Sample ID: Dup

Date Collected: 01/12/12 00:00

Date Received: 01/13/12 14:04

Lab Sample ID: 610-1084-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			138094	01/16/12 09:33	DAK	TAL CHI
Total/NA	Analysis	8082		1000	138220	01/18/12 10:16	GMO	TAL CHI
Total/NA	Analysis	Moisture		1	138027	01/14/12 13:03	CMV	TAL CHI

Laboratory References:
TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Certification Summary

Client: AECOM, Inc.

TestAmerica Job ID: 610-1084-1

Project/Site: The Brewery Works, Inc. 60225451

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Watertown		WI Dept of Agriculture (Micro)		105-266
TestAmerica Watertown	Illinois	NELAC	5	100453
TestAmerica Watertown	Wisconsin	State Program	5	128053530
TestAmerica Chicago	Alabama	State Program	4	40461
TestAmerica Chicago	California	NELAC	9	01132CA
TestAmerica Chicago	Florida	NELAC	4	E871072
TestAmerica Chicago	Georgia	Georgia EPD	4	N/A
TestAmerica Chicago	Georgia	State Program	4	939
TestAmerica Chicago	Hawaii	State Program	9	N/A
TestAmerica Chicago	Illinois	NELAC	5	100201
TestAmerica Chicago	Indiana	State Program	5	C-IL-02
TestAmerica Chicago	Iowa	State Program	7	82
TestAmerica Chicago	Kansas	NELAC	7	E-10161
TestAmerica Chicago	Kentucky	Kentucky UST	4	66
TestAmerica Chicago	Kentucky	State Program	4	90023
TestAmerica Chicago	L-A-B	DoD ELAP		L2304
TestAmerica Chicago	L-A-B	ISO/IEC 17025		L2304
TestAmerica Chicago	Louisiana	NELAC	6	30720
TestAmerica Chicago	Massachusetts	State Program	1	M-IL035
TestAmerica Chicago	Mississippi	State Program	4	N/A
TestAmerica Chicago	North Carolina	North Carolina DENR	4	291
TestAmerica Chicago	Oklahoma	State Program	6	8908
TestAmerica Chicago	South Carolina	State Program	4	77001
TestAmerica Chicago	Texas	NELAC	6	T104704252-09-TX
TestAmerica Chicago	USDA	USDA		P330-09-00027
TestAmerica Chicago	Virginia	NELAC Secondary AB	3	460142
TestAmerica Chicago	Wisconsin	State Program	5	999580010
TestAmerica Chicago	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: AECOM, Inc.

TestAmerica Job ID: 610-1084-1

Project/Site: The Brewery Works, Inc. 60225451

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: AECOM, Inc.

TestAmerica Job ID: 610-1084-1

Project/Site: The Brewery Works, Inc. 60225451

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
610-1084-1	CB-1	Solid	01/12/12 15:15	01/13/12 14:04
610-1084-2	CB-2	Solid	01/12/12 15:30	01/13/12 14:04
610-1084-3	CB-3	Solid	01/12/12 15:45	01/13/12 14:04
610-1084-4	CB-4	Solid	01/12/12 16:00	01/13/12 14:04
610-1084-5	CB-5	Solid	01/12/12 16:15	01/13/12 14:04
610-1084-6	Dup	Solid	01/12/12 00:00	01/13/12 14:04

Page 1 of 1 610-1084

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Watertown Division
602 Commerce Drive
Watertown, WI 53094

Phone 920-261-1660 or 800-833-7036
Fax 920-261-8120

Client Name

Client #:

Address:

11425 W. Lake Park Drive

City/State/Zip Code:

Milw. WI 53224

Project Manager:

Ric Maz

Telephone Number:

414 577 1335

Sampler Name: (Print Name)

Ric Maz

Sampler Signature:

Ric Maz

E-mail address:

TAT Standard

☒ Rush (surcharges may apply)

Date Needed:

Fax Results: Y N

E-mail: ☒ N

SAMPLE ID

CB-1

CB-2

CB-3

CB-4

CB-5

DUP

MS (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

MSD (CB-5)

Analyze For:

Soxhlet Extraction

PCBs (8082)

3500B/3540C or

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

3500B/3550B

Preservation & # of Containers

Matrix

SL - Sludge DW - Drinking Water

GW - Groundwater S - Soil/Solid

WW - Wastewater Specify Other

Field Filtered

G = Grab, C = Composite

Time Sampled

Date Sampled

1/12/12 3:15 G

1/11/12 3:30 G

1/11/12 3:45 G

1/11/12 4:00 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

1/11/12 4:15 G

QC Deliverables

None

☒ Level 2

(Batch QC)

Level 3

Level 4

Other:

REMARKS

LABORATORY COMMENTS:

Init Lab Temp:

5.6°C

Rec Lab Temp:

Custody Seals: ☒ N N/A

Bottles Supplied by TestAmerica: ☒ N

Method of Shipment: TA

Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 610-1084-1

Login Number: 1084

List Source: TestAmerica Watertown

List Number: 1

Creator: Herritz, Danica

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 610-1084-1

Login Number: 1084

List Number: 1

Creator: Lunt, Jeff T

List Source: TestAmerica Chicago

List Creation: 01/14/12 10:45 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 610-1084-1

Login Number: 1084

List Number: 2

Creator: Kelsey, Shawn M

List Source: TestAmerica Chicago

List Creation: 01/16/12 08:48 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	